

Effects of Shikunshito-Kamiho on fecal enzymes and formation of aberrant crypt foci induced by 1,2-dimethylhydrazine

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Abstract:

Shikunshito-Kamiho (SKTK) is a traditional Chinese medicine composed of eight crude drugs (Ginseng Radix, Hoelen, Atractylodis Rhizoma, Glycyrrhizae Radix, Prunellae Spica, Ostreae Testa, **Laminaria** Thallus, Sargassum), We investigated the effects of SKTK on pH, ammonia, fecal enzymes such as beta -glucuronidase, tryptophanase, urease, and formation aberrant crypt foci in the colon carcinogenesis model induced by 1,2-dimethyl-hydrazine (DMH), Water extract of SKTK was administered orally for 5 weeks to DMN-treated mice as 0.5% and 1.5% of the diet. beta -Glucuronidase, pH and tryptophanase were significantly inhibited after treatment of 0.5% and 1.5% SKTK, while urease was significantly reduced only during and after treatment of 1.5% SKTK as compared with control data. However, the ammonia concentration wasn't different in SKTK treated groups from control group. The incidence number of aberrant crypts foci (ACF) and aberrant crypts/focus in colon was significantly decreased by 0.5% and 1.5% SKTK mixed diets compared with that in rats treated with DMH alone. These results suggest that SKTK exterts anticarcinogenic activity on experimental murine colorectal cancer.